

not receiving β -blockers. The first reason for non-prescription was presumed contra-indication in 51.9% (177 pts). This contra-indication was asthma or COPD in 71%, symptomatic hypotension in 15%, bradycardia in 12% and other problems in 8%. The second reason for non prescribing β -blockers was previous side effects in 35.2% (120 pts) including heart failure decompensation in 39%, symptomatic hypotension in 36%, asthenia in 26%, bradycardia in 18%, impotence in 5% and others in 6%. Lastly, in 10.9% of patients without β -blockers, the reason for non prescription was fear of potential side effect.

Conclusion: Respiratory disease remains the main reason for not prescribing β -blockers in CHF despite the fact that selective β -blockers are now recommended in this population. Room remains for improvement in β -blockers prescription rate in CHF patients with concomitant COPD, underscoring the importance of pursuing education of cardiologists.

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Clinical and echocardiographic characteristics of multivalvular infective endocarditis

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Introduction: The multivalvular endocarditis is rare, frequently involving two valves, and is associated with bad prognosis.

Objective: To compare clinical, microbiological and in hospital prognostic of multivalvular infective endocarditis with single valve infective endocarditis.

Methods and patients: This is a retrospective study; included 225 patients admitted between 2001 and 2005 for management of infective endocarditis. Subsequently, our population was divided into two groups: Group 1: multivalvular patients (29 patients), Group 2: monovalvular patients (196 patients).

Results: Group 1's patients were younger. Most of patients of two groups had underlying heart disease, essentially rheumatic heart disease.

In group 1, there is more mitral insufficiency, more aortic insufficiency ($p=0.002$), but less aortic stenosis. Groups' 1 patients have more mechanical valves prosthesis ($p=0.004$). The germ most frequently involved was the staphylococcus in case of multivalvular disease (46.7% vs 37.3%) and streptococcus in case of monovalvular disease (26.7% vs 38.2%), but without a significant difference in the both cases. The localization of vegetations in multivalvular IE were: mitro aortic in 25 cases.

In the TTE, there are more vegetations in group 1 ($p=0.048$). Vegetations with size between 10 and 15 mm are more frequent in the group 1 ($p=0.019$). Valvular perforations are more frequent ($p=0.070$). Evolution to valvular abscess ($p=0.414$), and acute pericardial effusion ($p=0.051$) was more frequent in group 1.

During their hospital period, urgent surgical indication was more frequent in the group 1 (62, 1% vs. 51, 3%; $p=0.279$), with more frequent hemodynamic indication (72, 2% vs. 47%; $p=0.049$). Hospital mortality is higher in the group 1 (21, 4% vs. 17, 2%; $p=0.586$), but without a statistical significance.

Conclusion: Multivalvular endocarditis has specific characteristics: Staphylococcus is the more incriminated germ. It is associated to more complications, and necessitates more urgent surgery because of acute left heart failure.

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Additive role of beta blockade in determining positive response to cardiac resynchronization therapy

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Cardiac resynchronization therapy (CRT) and beta blockers (BB) are effective in advanced heart failure (HF). Often, due to side effects, BB are not used or dose not increased. We evaluated the titration of BB therapy with carvedilol (Carv) in CRT Responders (R) and Not Responders (NR), recruiting 65 HF outpatients (pts) with CRT indication and on optimal treatment [70% males; age 67.9 ± 12.6 years, ys; NYHA 2.7 ± 0.7 ; aetiology 44% coronary artery disease (CAD), 43% dilated cardiomyopathy (DCM)]. All underwent ECG, echocardiography, NYHA evaluation before and after 1 y of CRT. Considering NYHA response and improvement of systolic left ventricular function (EF%), R (Δ NYHA > 1 and/or Δ EF $> 5\%$) and NR were defined. During follow-up, Carv was titrated. Basally R and NR were similar for age, sex, HF aetiology (R 40% CAD, 42.5% DCM; NR 48% CAD, 40% DCM), QRS duration (168 ± 32 vs 178 ± 29 msec), end-diastolic (EDV, ml), end-systolic (ESV) volume, EF (R 25.1 ± 7.9 NR 27.4 ± 8.2), BB treatment (85 vs 88%) and Carv dose (16.3 ± 18.6 vs 13.2 ± 10.3 mg/day). Only basal NYHA (R 2.9 ± 0.7 NR 2.4 ± 0.6 , $p=0.002$) was significantly different. There was no significant difference in QRS duration postCRT (R 123 ± 32 , NR 127 ± 36 msec). After 1 y, R showed greater variation of EDV and ESV (Δ EDV -45 ± 46 vs -2 ± 56 $p=0.01$; Δ ESV -46 ± 46 vs -1 ± 45 $p=0.003$) and mitral regurgitation entity (-0.5 ± 0.7 vs 0 ± 0.7 $p=0.02$). After 1 y there was an overall increase of pts on BB (92.5 vs 92%), but R achieved a greater Carv dose (25.1 ± 20.4 vs 14.5 ± 7.3 mg/day $p=0.002$, Δ dose 8.7 ± 11 vs 1.2 ± 10.7 $p=0.009$). Carv dose increase and EF improvement were correlated ($r=0.40$, $p=0.02$), while dose increase and ventricular remodeling (LVR) were negatively related (Δ EDV $r=0.42$ $p=0.02$; Δ ESV $r=0.45$ $p=0.01$). In both groups CRT allows to introduce and augment BB dose, but only in R dose increase is statistically significant, correlating with LVR regression. Such results suggest an additive role of BB titration in determining CRT positive response.

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Therapeutic management of heart failure by french outhospital cardiologists is in line with ESH guidelines

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Rationale: HF treatment is often started during hospitalisation. It appeared interesting to describe the evolution of treatment after hospital discharge.

Objectives: To describe changes in HF treatment since hospital discharge after stratification on the time elapsed between discharge and beginning of the survey.

Methods: Cross sectional observational survey with retrospective collection of data at hospital discharge. Patients must have been diagnosed with HF and have been hospitalised for HF within the previous 18 months.

Results: 1452 HF patients met the inclusion criteria and started the survey. 1170 (67% males, age 72 ± 11 years, LVEF $40\% \pm 13\%$) have had at least one visit by the cardiologist between hospital discharge and entry in the survey. Patients were stratified according to the time since hospital discharge (< 3 months N=414, 3-6 months N=297, 6-12 months N=296, 12 to 18 months N=163). At hospital discharge, recommended betablocker, ACEI (of which perindopril) or ARB, are prescribed respectively to 826 (70,6%), 807 (69,0%) and 170 (14,5%) patients. Target doses were reached in 87 (10,5%) patients with betablocker, 411 (50,9%) patients with ACEI, 7 (4,1%) patients with ARB and 417 (43,4%) patients with either ACEI or ARB. At start of the survey, target doses were reached in 176 patients (20,4%) treated with betablockers, 470 patients (59,6%) treated with ACEI, 16 patients (7,2%) receiving ARB and 484 patients (49,7%) receiving either ACEI or ARB. Rates of patients reaching the target dose for betablockers increased significantly with time (from 19,5% to 29,8% $p=0.01$). No significant changes were noticed for ACEI or ARB.

Conclusion: Treatment strategies for Heart Failure started at hospital are well followed and amplified by French outhospital cardiologists after hospital discharge.